

# **Long-term Projection for Economy, Public Finance and Social Security**

**Summary of Material #5 in the Council on Economic and Fiscal Policy (April 2<sup>nd</sup>, 2024)**

**April 2<sup>nd</sup>, 2024, Cabinet Office**

- (Notes) 1. Each figure has been calculated mechanically based on certain assumptions, so it should be understood with considerable latitude.  
2. The name of the scenarios are revised from those shown in the original material.

# Assumptions

- Three scenarios are made by extending the cases in the “Economic and Fiscal Projections for Medium to Long Term Analysis” (MLP) in Jan. 2024.
- Under each assumption, public finance and social security (medical and long-term (LT) care) are projected until FY 2060.

## < Economic Conditions >

	① Projection of Past Trend Scenario (PP) (Extension of the Baseline Case of the MLP)	② Transition to a New Economic Stage Scenario (TN) (Extension of the Reference Case of the MLP)	③ Higher Growth Scenario (HG) (Extension of the Economic Growth Achieved Case of the MLP)																														
Economic Conditions	<ul style="list-style-type: none"> <li>• TFP growth rate: 0.5%</li> <li>• Labor Force: participation advances to some extent by FY2045 (e.g.) 65 to 69 y/o: 51% in FY2020 -&gt; 57% in FY2045</li> <li>• Total Fertility Rate: increase up to 1.36 (Medium-fertility scenario in the Population Projection)</li> </ul>	<ul style="list-style-type: none"> <li>• TFP growth rate: 1.1%</li> <li>• Labor Force: participation strongly advances (effectively get younger by 5 y/o) (e.g.) 65 to 69 y/o: 51% in FY2020 -&gt; 78% in FY2045</li> <li>• Total Fertility Rate: increase up to 1.64 (High-fertility scenario in the Population Projection)</li> </ul>	<ul style="list-style-type: none"> <li>• TFP growth rate: 1.4%</li> <li>• Labor Force: the same setting as TN</li> <li>• Total Fertility Rate: increase up to 1.8 (Higher fertility scenario in the Population Projection)</li> </ul>																														
Potential Growth Rate	<p>Average in FY2025 to 60</p> <p><b>Real Growth Rate (per capita) appx. 0.2% (per capita appx. 0.9%)</b></p> <table border="1"> <caption>Potential Growth Rate (PP)</caption> <thead> <tr> <th>(FY average)</th> <th>2025-30</th> <th>2031-40</th> <th>2041-50</th> <th>2051-60</th> </tr> </thead> <tbody> <tr> <td>Potential Growth Rate</td> <td>0.6</td> <td>0.3</td> <td>0.0</td> <td>0.1</td> </tr> </tbody> </table>	(FY average)	2025-30	2031-40	2041-50	2051-60	Potential Growth Rate	0.6	0.3	0.0	0.1	<p>Average in FY2025 to 60</p> <p><b>Real Growth Rate (per capita) appx. 1.2% (per capita appx. 1.8%)</b></p> <table border="1"> <caption>Potential Growth Rate (TN)</caption> <thead> <tr> <th>(FY average)</th> <th>2025-30</th> <th>2031-40</th> <th>2041-50</th> <th>2051-60</th> </tr> </thead> <tbody> <tr> <td>Potential Growth Rate</td> <td>1.4</td> <td>1.3</td> <td>1.1</td> <td>1.2</td> </tr> </tbody> </table>	(FY average)	2025-30	2031-40	2041-50	2051-60	Potential Growth Rate	1.4	1.3	1.1	1.2	<p>Average in FY2025 to 60</p> <p><b>Real Growth Rate (per capita) appx. 1.7% (per capita appx. 2.1%)</b></p> <table border="1"> <caption>Potential Growth Rate (HG)</caption> <thead> <tr> <th>(FY average)</th> <th>2025-30</th> <th>2031-40</th> <th>2041-50</th> <th>2051-60</th> </tr> </thead> <tbody> <tr> <td>Potential Growth Rate</td> <td>1.7</td> <td>1.7</td> <td>1.5</td> <td>1.7</td> </tr> </tbody> </table>	(FY average)	2025-30	2031-40	2041-50	2051-60	Potential Growth Rate	1.7	1.7	1.5	1.7
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(Notes) 1. Contribution of capital is mechanically calculated so that it increases as the increase in the contribution of TFP and that of labor in reference to those in the PP.

2. For prices after FY2034, CPI inflation rate is set to 0.8% in the PP and to 2.0% in the TN and the HG.

GDP deflator growth rate is lower than CPI inflation rate by 0.3%pt (the average difference between CPI inflation rate and Private Final Consumption Expenditure deflator growth rate.)

## < Public Finance and Social Security >

Extend each case in MLP according to the following assumptions to estimate Benefits and Burdens of Medical and Long-term Care, Primary Balance (PB) of Central and Local Governments Combined (% of Nominal GDP) and Outstanding Debt of Central and Local Governments Combined (% of Nominal GDP)

-Expense for Social Security: increase as the population, wages and prices and advancement of medical care

-Expense other than Social Security: increase as the nominal GDP growth

-Revenue: increase as the nominal GDP growth

# Social Security (Medical and Long-term Care)

- The increase of expenses for medical and LT care is considered to be higher than that of the nominal GDP if no restraint is implemented.
- For medical care expenses, while the increase due to the aging factor is on trend, the increase due to the other factors including advancement of medical care (currently 1% per year) could be stronger because of the shift to high-cost medical care.
- For LT care expenses, it is expected to consistently increase due to the aging factor.
- If reforms in benefits and burdens that cancel out the cost increase coming from advancement of medical care are attained, the long-term sustainability of the social security system is achieved under the TN and HG.
- For realizing these scenarios, various efforts are necessary; optimization of benefits through technologies including DX, establishment of the medical and LT care supply system that meets local conditions, revision of the benefit and burden structure across the working and elderly generations through a thorough implementation of the ability-to-pay principle.

The following factors are taken into account (Remark: “other factors” are concerned only with medical care)

## Medical and LT Care Benefits FY2034 to 60

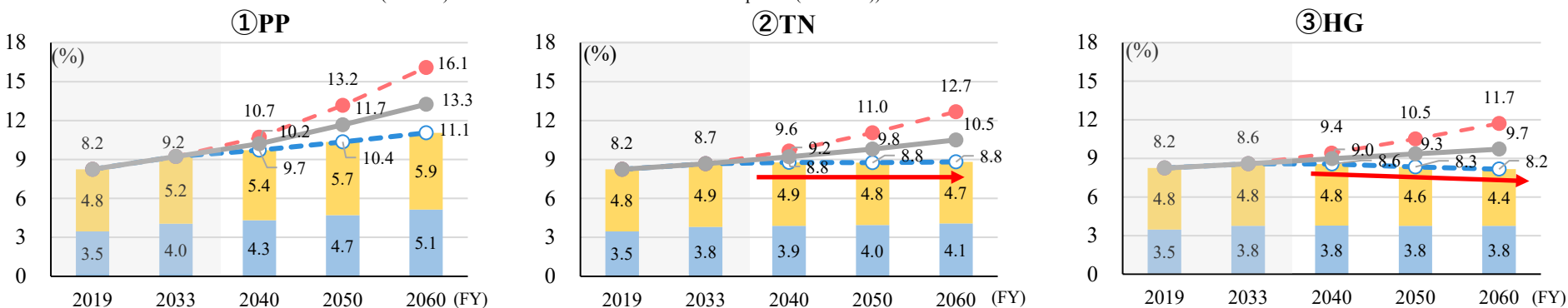
- Change in demographic composition and the unit cost (weighted average of growth rates of prices and wages)
- Other factors (advancement of medical care, etc.)

- 0% per year (reforms in benefits and burdens are implemented so that the cost increase coming from advancement of medical care is canceled out)
- 1% per year (increase at a current pace)
- 2% per year (advancement in medical care is accelerated)

## Benefits and Burdens of Medical and LT Care (% of GDP)

- Benefits (No reform; other factors are set to 1% per year)
- Benefits (No reform; other factors are set to 2% per year)
- Benefits (With reforms; other factors are set to 0% per year)
- Insurance Premium Burdens (With reforms)
- Public Burdens (With reforms)

(Remark) the darker shaded area refers to the MLP period (~FY2033)



(Notes) 1. Based on the “Basic Data on Medical Insurance,” “Survey of LT Care Benefit Expenses” by the Ministry of Health, Labor and Welfare, “The Financial Statistics of Social Security in Japan” by the National Institute of Population and Social Security Research, and so on. The figures in FY 2019 are based on the actual values. For the estimates, figures until FY2024 are calculated starting from the data and extrapolated using the growth rate of the budget, etc. After that, the figures are estimated as follows: growth in per capita medical expenses for each age group: 0.5 times CPI inflation rate plus 0.5 times wage growth rate plus other factors; growth in per capita LT care expenses: 0.35 times CPI inflation rate plus 0.65 times wage growth rate. The nominal GDP growth rate per worker is used for the wage growth rate after the period covered by the MLP.

2. ‘Benefits’ stand for insurance benefits and do not include public medical and LT care assistance nor public benefits from municipal independent project. ‘Public Burdens’ are calculated applying the burden ratios of current respective schemes. ‘Insurance Premium Burdens’ are calculated as residuals.

3. This calculation assumes that the reform is implemented through the restraint of the benefits side.

# Public Finance

- For economic and fiscal policies, it is important to strengthen the growth so that the HG and TN are realized by encouraging investment through public-private partnerships and ensuring wise spending with EBPM, etc.
- In long term, even with high economic growth, the increase in social security expenditure works to shrink the PB surplus (and could cause PB deficit). With nominal interest rate larger than economic growth rate, the outstanding debt to GDP ratio starts to go up as the PB surplus gets lower than a certain threshold.
- If the reforms in the previous page is realized, even under TN, PB surplus is maintained and a steady decline in outstanding debt to GDP ratio follows.

## Assumptions for Public Finance

FY2034 to 60

### • Social Security Expenses

- Medical and LT care: 'Public Burdens' in the previous page ('other factors' are set to **1%, 2% or 0%**)
- Public Pensions: based on the financial verification in 2019 (Public burdens; half of the benefit of the basic pensions)
- Others: increase as nominal GDP growth

• Expenses other than social security: increase as nominal GDP growth

• Revenue : increase as nominal GDP growth

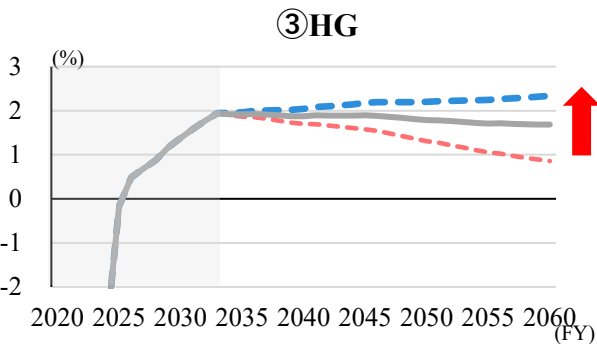
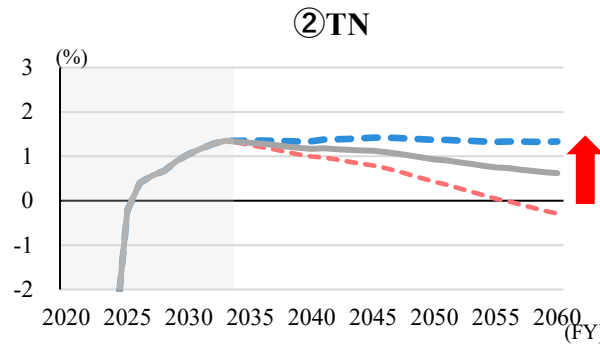
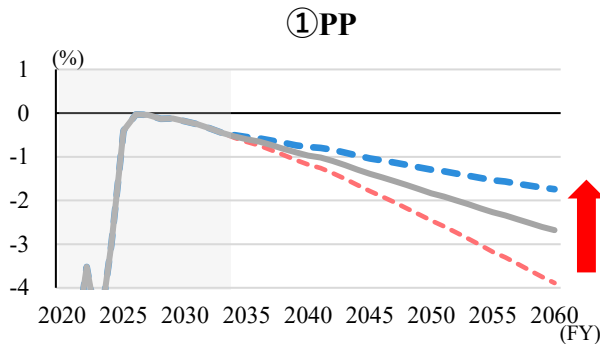
• Long-term interest rate: nominal GDP growth plus 0.6%pt

— No reform (other factors: **1%** per year)  
 - - - With reforms (other factors: **0%** per year)

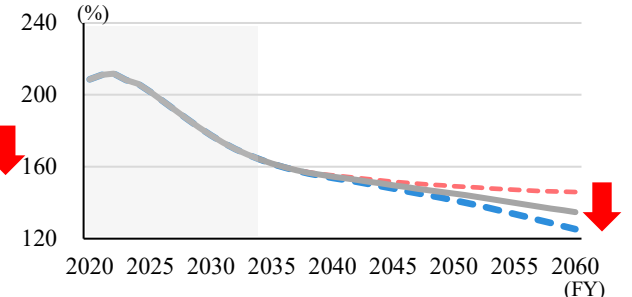
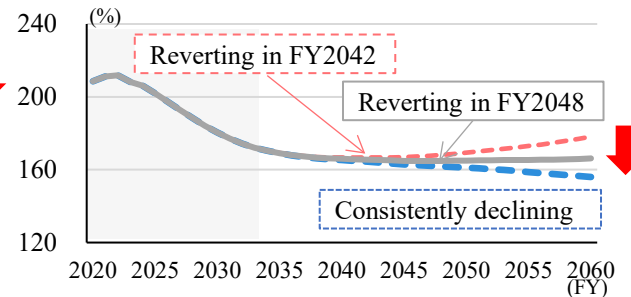
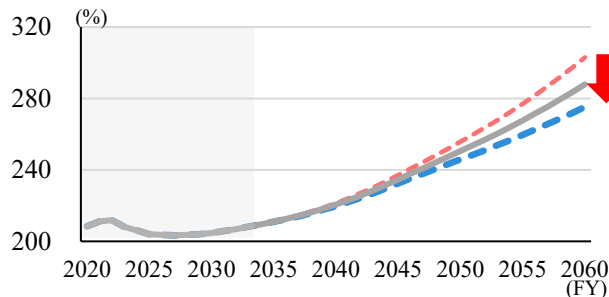
— No reform (other factors: **2%** per year)

(Remark) the darker shaded area refers to the MLP period (~FY2033)

### PB (% of GDP)



### Outstanding Debt (% of GDP)

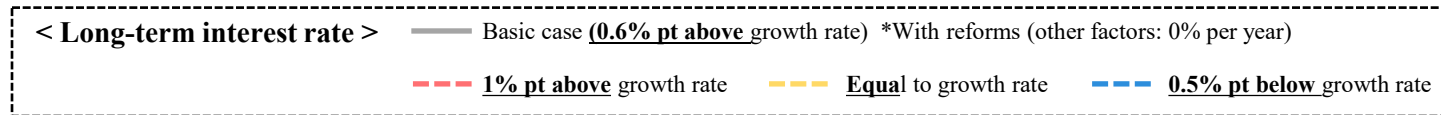


(Notes) Long-term interest rate in each scenario is set so that the difference between nominal GDP growth rate and long-term interest rate in the final year of MLP is replicated.

# Impact of Long-term Nominal Interest Rate Change

- Under the TN with the effects of the reforms in the previous page, the debt to GDP ratio will begin to rise if long-term nominal interest rates exceed the nominal growth rate by 1% pt.
- On the other hand, strong growth in the HG and the resulting primary balance surplus will further strengthen the long-term stability of Japan's economic and fiscal position.

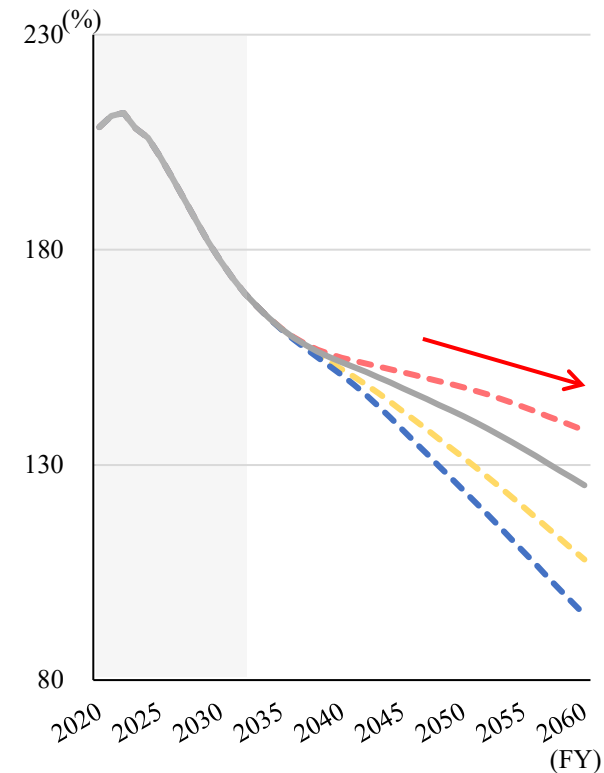
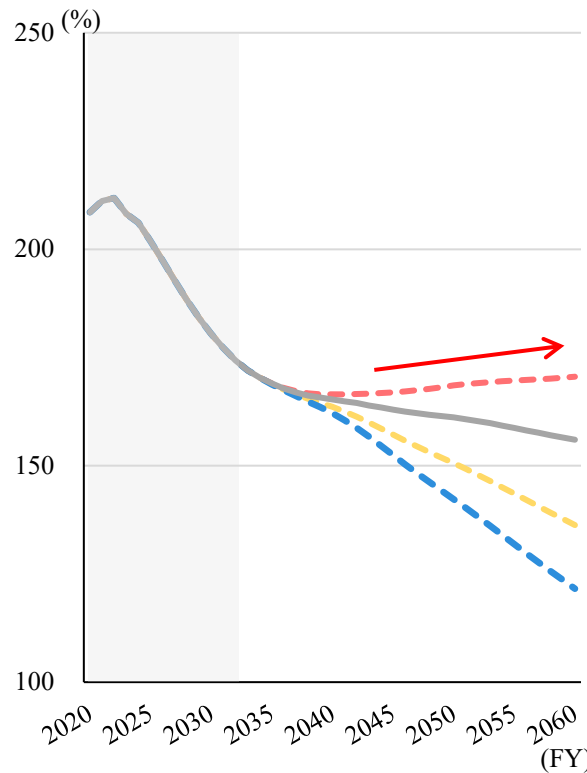
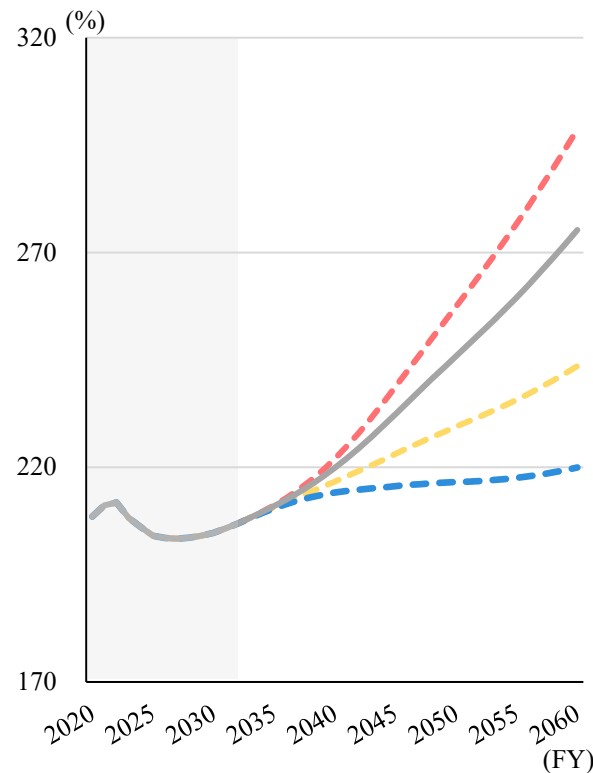
## Sensitivity of the Outstanding Debt (% of GDP) to changes in long-term nominal interest rates



①PP

②TN

③HG



(Notes) Long-term interest rates are assumed to change over a five-year period beginning in FY2034.